Leading by example, saving energy and taxpayer dollars in federal facilities

Helping Agencies Buy Energy-Efficient Products

The federal government is the world's largest-volume buyer of energy-related products. Simply by purchasing and specifying energy-efficient products, federal agencies can reduce energy use, achieve enormous cost savings, and help avoid pollution and greenhouse gas emissions.

The Energy Policy Act of 2005 (P.L. 109-58) and Executive Order 13123 require federal buyers to purchase ENERGY STAR®-qualified or FEMP designated products. In addition, Executive Order 13221 orders agencies to select products which use less power in standby mode. These purchasing mandates are codified in the Federal Acquisition Regulations (FAR) 48 CFR 23.203.

ENERGY STAR-qualified or FEMP designated products range from office fax machines and household dishwashers to water-cooled chillers and industrial luminaires. Purchase of these energy-efficient products is mandatory for all federal acquisitions and can be waived under only two conditions: no efficient product meets an agency's technical needs, or no efficient product is cost-effective for a specific application.

Assistance with product procurement

FEMP helps federal purchasers identify efficient products, provides model language for specifying efficient products in capital projects and service contracts, and gives buyers advice on everyday procurement decisions.

FEMP publishes a series of *Purchasing Specifications for Energy-Efficient Products*. For each product, FEMP identifies the efficiency levels needed to meet the requirements for procurement of energy-efficient products. In addition to providing the efficiency criteria for each product, the *Specifications* also:

- offer tips to help the federal purchaser (or specifier) select the right technology, size and install the equipment properly, and use it efficiently;
- give a cost-effectiveness example to aid the buyer in determining whether a first-cost premium for a more efficient model is justified in terms of life-cycle energy cost savings;
- recognize federal supply sources that clearly identify and prominently display complying products, as required by the Energy Policy Act; and
- list several organizations and publications that can be used to research each product more thoroughly.

FEMP's *Purchasing Specifications for Energy-Efficient Products* are published online at www.eere.energy.gov/femp/procurement/. Specifications for each product may be viewed online or downloaded in PDF format for printing. A CD-ROM collection of the *Specifications* is also available on request for those who do not have Web access. Whenever there is a significant change in the market, FEMP revises the energy efficiency levels to a market-leading threshold and updates the *Specifications*.

To assist federal buyers in identifying qualifying products, the FEMP Procurement Web site provides links to lists of models that meet the required efficiency levels. These lists, which are available for all ENERGY STAR-qualified products, identify efficient models by brand name and model number. The lists are accessible through the links at the bottom of each product specification page under "For More Information," or via the ENERGY STAR Web site at www.energystar.gov/products.

Estimating energy cost savings

FEMP and ENERGY STAR offer two software tools to help buyers estimate energy savings from energy-efficient products:

1. *Energy Cost Calculators* compute lifetime energy cost savings for specific products and applications. The calculators allow users to input their own

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values (e.g., utility rates, hours of use, etc.) to estimate the energy cost savings from buying a more efficient model. The FEMP energy cost calculators are available at www.eere.energy.gov/femp/procurement/eep_eccalculators.cfm. The ENERGY STAR calculators are at www.energystar.gov/index.cfm?c=bulk_purchasing.bus_purchasing.

2. FEMP's *Building Life-Cycle Cost* (BLCC) software provides a tool for detailed life-cycle cost analysis. For more information visit www.eere.energy.gov/femp/information/download_blcc.cfm

Low standby power devices

As directed by Executive Order 13221, FEMP works with ENERGY STAR to set specifications for federal purchasing of low standby power products. Federal buyers can use several clues to identify products that consume standby power, including features such as:

- an external power supply (e.g., laptops, cell phones, inkjet printers)
- a remote control (e.g., TVs, VCRs, and consumer audio equipment)
- a continuous digital display (e.g., microwaves and other appliances)
- a rechargeable battery (e.g., portable tools, exit signs)

In addition, most types of office equipment (e.g., computers, monitors, printers, fax machines, copiers) use standby power.

FEMP has created a database of manufacturer-reported standby power measurements for products often sold to federal customers. The database indicates which products meet the standby power requirements. The *Purchasing Specification* for low standby power products, which includes a link to this database, can be found at www.eere.energy.gov/femp/procurement/eep_standby_power.cfm

Making energy efficiency "standard practice" in the federal government

In addition to publishing the *Purchasing Specifications* and keeping an active schedule of agency outreach and training, FEMP supports federal procurement of energy-efficient products in two other ways:

1. *Adding efficiency criteria to federal guide specifications*. Guide specifications are the agency-wide construction requirements that determine which products will be used in an agency's construction and major renovation projects. A number of federal agencies develop their own. For example, the Department of Defense created and maintains a set of *Unified Facilities Guide Specifications* (UFGS), which now incorporate FEMP efficiency levels on motors, commercial packaged air conditioners, chillers, and various lighting products. The Environmental Protection Agency is including ENERGY STAR and FEMP specifications in its new *Federal Guide for Green Construction Specs*. Both are available from the Whole Building Design Guide at www.wbdg.org.
2. *Identifying efficient products in federal supply agency catalogs*. FEMP is working with the General Services Administration and the Defense Logistics Agency to meet the requirements of the Energy Policy Act. The Act requires federal supply agencies to clearly identify and prominently display ENERGY STAR-qualified or FEMP designated products in their on-line listings and catalogs. It also requires the supply agencies to sell only complying products unless a federal buyer documents the case for an exemption in writing. An exemption is allowed only if an efficient product cannot meet the functional requirements or is not cost-effective for a specific application.

For more information:

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A Strong Energy Portfolio for a Strong America

Energy efficiency and clean, renewable energy will mean a stronger economy, cleaner environment, and greater energy independence for America. Working with a wide array of state, community, industry, and university partners, the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy invests in a diverse portfolio of energy technologies.

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